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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/757,882

01/15/2004

Gordon F. Caruk

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EXAMINER

RAY, GOPAL C

ART UNIT

PAPER NUMBER

2111

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/757,882

Applicant(s)

CARUK, GORDON F.

Examiner

Gopal C. Ray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 1-12 and 17-19 is/are allowed.  
6) ☒ Claim(s) 13 and 20-30 is/are rejected.  
7) ☒ Claim(s) 14-16 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Claims 1-30 are presented for examination.
2. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13, 20 and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over of US Patent 6,992,987 granted to Kobayashi in view of US Patent 5,937,176 granted to Beasley et al.

As per claim 13, the reference of Kobayashi teaches, "transmitting data to a first peripheral over a first plurality of PCI Express port connectors" in Fig. 15, element 1502 and col. 16, lines 44-51 and "receiving data from the first peripheral system over a second plurality of PCI Express port connectors" in Fig. 15, element 1504 and col. 16, lines 44-51.

The reference of Kobayashi fails to expressly teach, "wherein the second plurality is less than the first plurality". However, the above feature was well known to one of ordinary skill in the data processing art at the time the invention was made as evidenced by Beasley et al. The reference of Beasley et al. teaches the feature in Fig. 9 and col. 8, lines 7-8. Therefore, it would have been obvious to one of ordinary skill in the data processing art at the time the invention was made to modify the system of Kobayashi to implement the above feature to arrive at the claimed invention because both the prior art systems are analogous to improving data communication and one of ordinary skill in

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the data processing art at the time the invention was made would have selected the above feature because this is one of the possibilities already known in the data processing art which one of ordinary skill in the art at the time of the invention would like to adopt under circumstances without the exercise of inventive skill so as to allow the system to take advantage of the many benefits provided by the feature such as maintaining flow of data using less hardware.

As per claim 20, the claim recites an apparatus. However, the limitations of the claim are parallel to the limitations in claim 13. Therefore, in teaching the construction and use of the device, the combination of US Patent 6,992,987 granted to Kobayashi and US Patent 5,937,176 granted to Beasley et al. teaches a corresponding apparatus.

As per claim 30, the claim is rejected for similar reasons as discussed in the rejection of claim 13 above.

4. Dependent claims 21-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6,992,987 granted to Kobayashi in view of US Patent 5,937,176 granted to Beasley et al. as applied in claim 20 above, and further in view of common knowledge in the data processing art.

As per dependent claims 21-29, the claims are rejected for the same reasons as discussed in the rejection of claim 20 with the exception of an extra limitation added to each claim such as "wherein the system is an image system" in claim 21, etc. The examiner takes official notice that the above claimed features are well known or within the skill of an ordinary person in the data processing art at the time of the invention. These are various straightforward possibilities from which one of ordinary skill in the

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data processing art at the time of the invention would select one or the other in accordance with circumstances without exercising inventive skill. Therefore, it would have been obvious to one of ordinary skill in the data processing art at the time the invention was made to modify the system of Kobayashi in view of Hein to implement the above features to obtain the claimed invention because that would allow the system to take advantage of the many benefits provided by the known features and to be compatible with a widely used standard in the data processing art.

5. Claims 1-12 and 17-19 would be allowable over the prior art of record. Dependent claims 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an Examiner's Statement of Reasons for Allowance:

The claimed invention is directed to "method and device for transmitting data". The examiner has done complete search and found no prior art, alone or in combination, teaches or fairly suggests the limitation such as, "a first set of connections to support a symmetric PCI Express data transfer in a first mode of operation and a second set of connections to support an asymmetric PCI Express data transfer in a second mode of operation" in combination with other claimed elements as claimed in independent claim 1 and similar limitations in independent claim 17. Dependent claims 14-16 further limit the subject matter of parent claim 13 which prior art of record, alone or in combination does not teach or fairly suggests. Therefore, the invention claimed in

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claims 1-12 and 14-19 is considered allowable because combinations recited in the claims are patentably distinguished from the prior art of record.

Any comments considered necessary by applicant must be submitted in response to this office action to avoid processing delays. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

6. Applicant's arguments filed on 10/17/06 have been fully considered but they are not persuasive. Applicant argues that the prior art does not show "wherein the second plurality is less than the first plurality". However, the reference Beasley et al. clearly teaches that one set of connectors can be a subset of another set of connectors by activating required number of wires in Fig. 9 and col. 8, lines 7-8. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art (emphasis added). See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the examiner wants to point out that it is within the skill of an ordinary person in the data processing art to take the advantage of the above concept in a wide variety of computing and communications platforms such as using only the number of wires needed to become efficient and cost effective. See col. 2, lines 59-61 of Beasley et al. for motivation. Furthermore, the test for obviousness is not whether the features of a

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secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). ". It is the examiner's position that the broadly written claims read on the above prior art.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. If applicants are aware of any prior art better than those are of record, they are required to bring the prior art to the attention of the examiner. Applicants are also reminded that each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to

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patentability as defined in 37 CFR 1.56. Applicants are advised to submit any information material to patentability in accordance with 37 CFR 1.97 and 1.98.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gopal C. Ray whose telephone number is (571) 272-3631. The examiner can normally be reached on Monday - Friday from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (571) 272-3632. The fax phone number for this Group is (571) 273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [[mark.rinehart@uspto.gov](mailto:mark.rinehart@uspto.gov)].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC central telephone number is (571) 272-2100.



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Moreover, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lastly, paper copies of cited U.S. Patents and Patent Application Publications ceased to be mailed to applicants with office actions as of June 2004. Paper copies of Foreign Patents and Non-Patent Literature will continue to be included with office actions. These cited U.S. Patents and Patent Application Publications are available for download via Office's PAIR. As an alternate source, all U.S. Patents and Patent Application Publications are available on the USPTO web site ([www.uspto.gov](http://www.uspto.gov)), from the office of Public Records and from commercial sources. Applicants are referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 for information on this policy. Requests to restart a period for response due to a missing U.S. Patent or Patent Application Publications will not be granted.

*Gopal C. Ray*  
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PRIMARY EXAMINER  
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